

Work Order ID 150835

Thursday, September 08, 2016 1:27:44 PM

150835

Page 1

Item ID: D2519

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Clamp

Stop

NS2

Start Date: 9/12/2016 Start Qty: 60.00

60

Cust Item ID:

Required Date: 9/28/2016 Req'd Qty: 60.00

60

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date: SEP 08 2016

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2519

Rev D

102

0.00

102

Purchasing

Memo

0.00

Purchasing

ISSUE PO 33617

CUT PER DRWG D2519 REV.D

600 SEP 12 2016

DAS
13
9-89

105

Receive & Inspect for Damage & Mat'l Certs

0.00

105

Packaging

Memo

0.00

Packaging

600 SP16-9-26.

115

QC6- Inspect dimensions to drawing

0.00

115

QC

Memo

0.00

Quality Control

600

DAS
38
9-89

OCT 05 2016

120

W/ target open holes

600

02/16/10/09

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																			
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Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																			
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Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____																						
Misidentified ☐	☐	Past Due ☐																							

Work Order ID 150835

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150835

Page 2

Item ID: D2519

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Clamp

Start Date: 9/12/2016 Start Qty: 60.00

60

Cust Item ID:

Required Date: 9/28/2016 Req'd Qty: 60.00

60

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Brake NC	Form as per dwg Small Fab	0.00			DAS 30 9-89	(60)			OCT 07 2016
Brake NC	Memo 1- remove press and machine marking as necessary	0.25							
140 *140* QC	QC5- Inspect part completeness to step on W/O	0.00				(60)			DAS 38 9-89 OCT 12 2016
Quality Control	Memo	0.20							
150 *150* Packaging	Identify as per dwg & Stock Location: <u>51542</u>	0.00				(60)			OCT 14 2016 DAS 6 9-89
Packaging	Memo	0.10							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																
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Work Order ID 150835

Thursday, September 08, 2016 1:27:44 PM

150835

Page 3

Item ID: D2519

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Clamp

Start Date: 9/12/2016 Start Qty: 60.00

60

Cust Item ID:

Required Date: 9/28/2016 Req'd Qty: 60.00

60

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

1.00

Quality Control

DAS
21
9-89

OCT 14 2016

US 16/10/14

OCT 14 2016

DAS
21
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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OTHER : ☐																									

Picklist Print

Thursday, September 08, 2016 1:27:48 PM

Page 1

Work Order ID: 150835

150835

Parent Item: D2519

D2519

Parent Item Name: Clamp

Start Date: 9/12/2016

Required Date: 9/28/2016

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP: B00.03.16Re-format, laser cuttingEC
MADE IN HOUSE DD VERF:EC

IPP REV:C 11.10.05

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2519P		Purchased	No				Each	0.0000		60			
D2519P									**				
Clamp													
M304S16GA		Purchased	No			100	sf	99.6000	0.0495	3.126316			
M304S16GA									**				
304/316 Sheet .063													

60x Sp16-9-26

SEP 12 2016

DAS
13
9-89

Location

Loc Qty

Loc Code

MAT010

92.6

m135377

52.6

m135559

40

TPI

7

m134604

7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

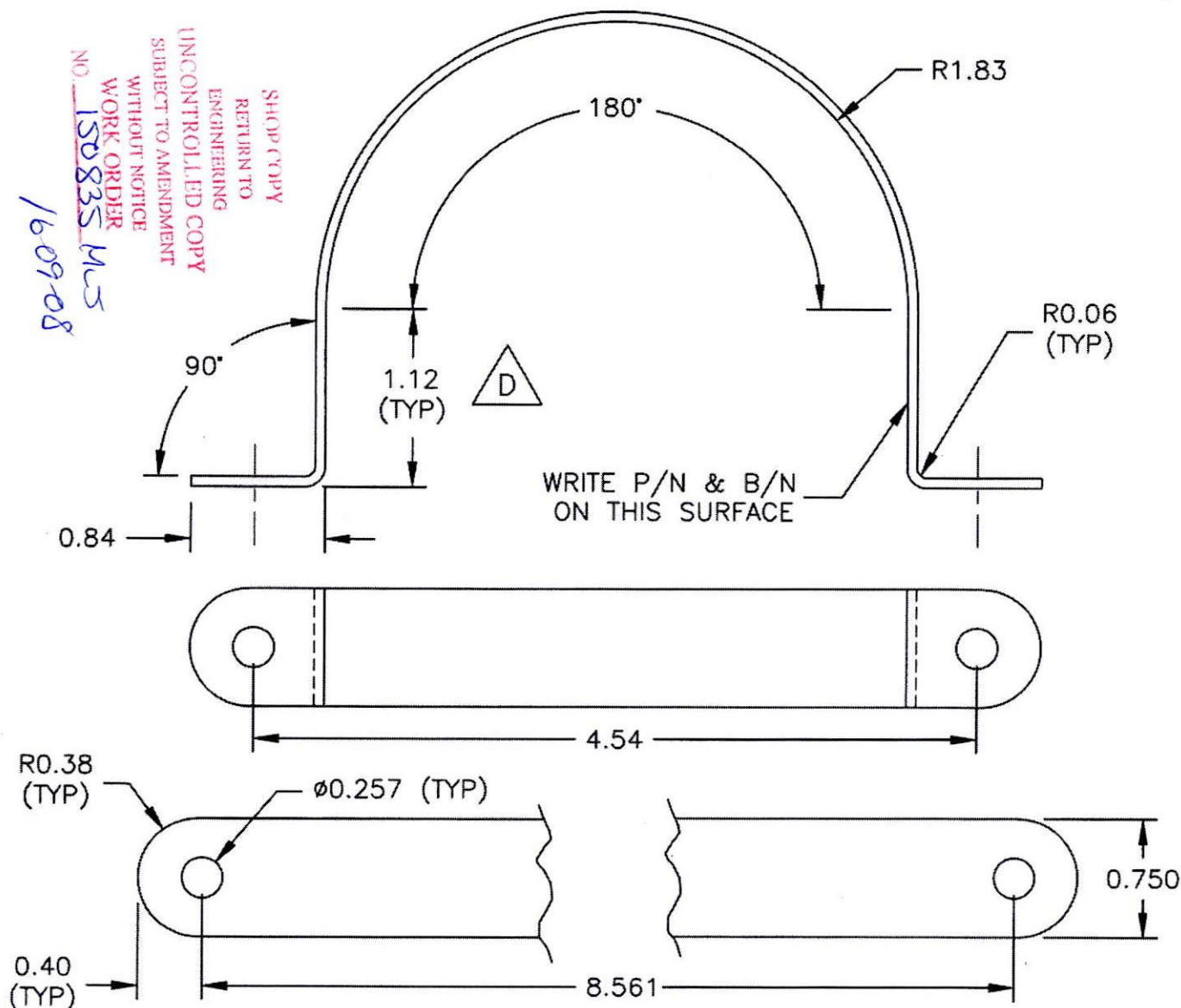
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

DART

DESIGN <i>HT</i>	DRAWN BY <i>HT</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>UP</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2519	REV. D SHEET 1 OF 1
DATE 04.11.08		TITLE CLAMP	SCALE 1:1
A	95.11.28	NEW ISSUE	
B	97.03.24	ADD MATERIAL SPECIFICATION	
C	00.02.29	REDRAWN; ADDED FLAT PATTERN	
D	04.11.08	1.12 WAS 0.93	

RELEASED
04.11.26 *[Signature]*

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
NO. 150835 M/S
/60908

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS 0.063 (16 GAUGE) THICK, (REF. DART SPEC. M304S16GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT INK MARKER ON SURFACE SHOWN

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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OTHER :																																																																					



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33617

Purchase Order Date 9/12/2016

PO Print Date 9/19/2016

Page Number 2 of 4

Order From :

VC-TPI001

Ship To : DART AEROSPACE LTD

TPI INDUSTRIES INC.
148 RUE GOODFELLOW
DELSON, QUEBEC J5B 1V4
CANADA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

450-633-0484

Ship To Contact

Ship To Phone

Ship Via:

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

3	D3405-041F	Lug Assembly	10/3/2016	10.00	\$9.45	\$94.50
			Yes	Each		
			10/3/2016			

CUT AS PER DWG D3405 REV. B
B150833
MATERIAL 304 SHEET 11GA

Line Total: \$94.50

4	D4011-1P	Clamp, Short	10/3/2016	60.00	\$10.00	\$600.00
			Yes	Each		
			10/3/2016			

CUT AS PER DWG D4011 REV. C
B150834
MATERIAL 304 SHEET 14GA

Line Total: \$600.00

5	D2519P	Clamp	10/3/2016	60.00	\$3.00	\$180.00
			Yes	Each		
			10/3/2016			

CUT AS PER DWG D2519 REV. D
B150835
MATERIAL 304 SHEET 16GA

SP 16-9-26

Note:

9/19/2016

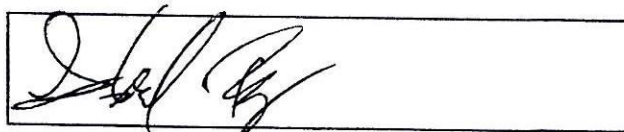
TPI Waterjet cutting follow up sheet

wc100132

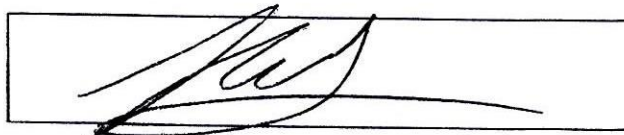
machine hours	1316
diamond hours	32
mixing tube hours	0
TAJ calibration	14-09-2016 (1314h)

customer po	part #	Qty	lot #	date done	cut by	quality spot check	Note
dart 33617	d4150-3	12	see mill test	15-09-2016	GR	Jonathan Lessard Gabriel Rioux	
dart 33617	d3405-043	10	see mill test	15-09-2016	GR	Jonathan Lessard Gabriel Rioux	
dart 33617	d3405-041	10	see mill test	15-09-2016	GR	Jonathan Lessard Gabriel Rioux	10 instead of 12 (not enough material to produce)
dart 33617	d4011-1	60	see mill test	15-09-2016	GR	Jonathan Lessard Gabriel Rioux	
dart 33617	d2519	60	see mill test	15-09-2016	GR	Jonathan Lessard Gabriel Rioux	Sp 16-9-26

Opérateur



Superviseur



T.P.I. INDUSTRIES INC.

148 GOODFELLOW
DELSON, QUÉBEC J5B 1V4
CANADA
Tel: (450) 633-0484
Fax: (450) 633-0879

Packing Slip

Packing Slip No.: 7785
Date: 2016-09-20
Page: 1

Sold to: Dart Aerospace Chantal Lavoie 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada	Ship to: Dart Aerospace Chantal Lavoie 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada
Order No.: 33617	Sold By:
Shipped By:	Ship Date: 2016-09-20
Tracking No.:	

Item No.	Unit	Description	Quantity
d4150-3	Chaque	d4150-3 arm plate	12
d3405-043	Chaque	d3405-043 gh lugs	10
d3405-041	Chaque	d3405-041 gh lugs	12
d4011-1	Chaque	d4011-1 clamp	60
d2519	Chaque	d2519	60
d5152-1	Chaque	d5152-1 fwd post mount	12
d4925-1	Chaque	d4925-1 eaps mounting plate	12
d4462-1	Chaque	d4462-1 baffle	4
d4462-3	Chaque	d4462-3 baffle	4

SEP 16 9-26

Comment: Net / 30 from date of invoice 2% svc. chg. on invoices over 30 days

